

REMARKS

I. General

Claims 1-43 are pending in the present application. The issues in the current Office Action are as follows:

- Claims 1-43 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
- Claims 1, 3, and 8-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US 6,775,780 (hereinafter *Muttik*), and further in view of US 7,096,501 (hereinafter *Kouznetsov*).
- Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muttik* in view of *Kouznetsov*, and further in view of US 7,203,192 (hereinafter *Desai*).
- Claims 13-14, 16-22, 26-34 and 40-43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muttik* and further in view of *Desai*.
- Claims 2, 4-7 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muttik* in view of *Kouznetsov* and further in view of US 7,032,005 (hereinafter *Mathon*).
- Claims 15, 23-25 and 35-39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muttik* in view of *Desai* and further in view of *Mathon*.

Applicant thanks the Examiner for the courtesy and professionalism shown thus far. Applicant hereby traverses the rejections and requests reconsideration and withdrawal in light of the remarks contained herein.

II. Claim Rejections

A. § 101 Rejection

On pages 3-4, claims 1-43 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Applicant respectfully traverses the rejection.

35 U.S.C. §101 provides:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Thus, 35 U.S.C. §101 defines four categories of inventions that Congress deemed to be appropriate subject matter of a patent: processes, machines, manufactures, and compositions of matter. The latter three categories define “things” or “products” while the first category defines “actions.” *See* 35 U.S.C. §100(b) (“The term ‘process’ means process, art, or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.”).

The claims are clearly directed toward statutory subject matter. Claims 1-12 and 30-43 are directed to a system for providing protection against malicious code. The claims are directed to a system, which is statutory subject matter (i.e., a manufacture and a machine). Since claims 1-12 and 30-43 are directed to at least two of the enumerated categories of patentable subject matter, there is no need to discuss whether there is a useful, concrete, and tangible result.

Nevertheless, in the interest of having a full discussion it is noted that the subject matter of claims 1 and 30 provides a useful, concrete, and tangible result. For instance, claims 1 and 30 recite, respectively, in part, “intercept said information communication and to analyze said information communication for malicious code,” and “said malicious code analyzer provides a malicious code remediation function.” Applicant cannot understand how the rejection can assert that the above-recited features of independent claims 1 and 30 are not useful. Clearly, analyzing information communication for malicious code and providing a

malicious code remediation function are useful. Should the Office persist in the rejection, clarification of this point is respectfully requested.

Further, claims 1 and 30 recite concrete results. The term “concrete” refers to repeatability. *In re Swartz*, 232 F.3d 862, 864, 56 USPQ2d 1703, 1704 (Fed. Cir. 2000), *see also* MPEP § 2106. The present specification describes how to make and use the invention, and in that description it is understood that the results of the embodiments described therein are repeatable. In fact, there is no assertion, nor any proffered evidence, from the Office that the subject matter of any of the claims lacks repeatability. Therefore, it is believed that the results of the subject matter of claims 1 and 30 are concrete. Should the Office persist in the rejection, clarification of this point is respectfully requested as well.

Moreover, independent claims 1 and 30 recite tangible results. A tangible result is a beneficial result or effect, a real-world result. *See, e.g., Gottschalk v. Benson*, 409 U.S. 63, 71-72, 175 USPQ at 676-77 (1972) and *Corning v. Burden*, 56 U.S. (15 How.) 252, 268, 14 L.Ed. 683 (1854), *see also* MPEP § 2106. Claim 1 recites, in part, “[a] system for providing protection against malicious code... intercept said information communication and to analyze said information communication for malicious code.” Intercepting information communication and analyzing the information communication for malicious code is clearly a beneficial result or effect. Further, intercepting information communication and analyzing the information communication for malicious code is a real-world result. In independent claim 30, providing a malicious code remediation function is clearly a beneficial, real-world result. It is unclear to Applicant how the rejection can assert otherwise. Should the Office persist in the rejection, specific reasoning and/or evidence showing a lack of a beneficial, real-world result is respectfully requested.

The rejection asserts that the feature of claim 1, “configured to be transparent,” somehow causes the claim to recite something that is not a “real system or machine.” Office Action at 2. The term, “transparent” does not mean that something is not real. Rather, it refers to how the analyzer is configured with respect to systems of the communication system. Applicant respectfully points the Examiner to the specification, which gives an

exemplary, non-limiting discussion of a transparent configuration at paragraphs [0032], [0035] and [0036].

The rejection further asserts that transparency can be interpreted as hardware and/or software. Office Action at 2-3. There is no law, whether statute or case law, prohibiting the patenting of hardware or software. Should the Office persist in the rejection, citation to a case or statute to support such an assertion is respectfully requested. The rejection of claim 1 further states that “Applicant is required to elaborate the claimed language to show the real meaning of the configuration of the transparency.” *Id.* at 2. Applicant has claimed the subject matter as Applicant sees fit, and Applicant sees no problem in 35 U.S.C. § 101 nor any need to elaborate the term “transparent.” Further, during examination, claim terms must be given their broadest reasonable interpretation consistent with the specification. MPEP § 2111. Applicant once again refers the Examiner to the specification for non-limiting, exemplary discussions of various embodiments, including discussions of transparency. For at least the reasons described above, it is believed that claims 1 and 30, as well as their dependent claims, are patentable.

Independent claim 13 is also rejected under 35 U.S.C. § 101. It is noted that the claim is presented in *Beauregard* form, and the Commissioner has agreed that such claims recite patent-eligible subject matter. *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995). Further, claim 13 recites a computer program product having a computer readable storage medium, which is a manufacture, and articles of manufacture are specifically recited as patent-eligible in 35 U.S.C. § 101. Beyond any doubt, claim 13 recites patentable subject matter, as evidenced by the Commissioner’s agreement.

Nevertheless, claim 13 is rejected under the rationale that its computer readable medium “appears to include tangible media such as signal, carrier waves, transmissions optical waves, transmission media incapable of being touched or perceived absent the tangible medium through which they are conveyed.” The rejection comes to this conclusion by asserting that “computer readable medium” is not defined anywhere in the specification and also because paragraph [0003] mentions something about communication. Office Action at 3. Applicant is not required to define “computer readable medium.” Once again, the

Examiner is respectfully referred to MPEP § 2111, which instructs that claims should be interpreted according to their broadest reasonable interpretations consistent with the specification. It appears that the rejection may use paragraph [0003] of the specification to assert that Applicant has somehow used “computer readable medium” in a way that encompasses signals and carrier waves. On the contrary, paragraph [0003] describes background subject matter and does not define, or even attempt to define, “computer readable medium.” It is unclear to Applicant how paragraph [0003] of the specification is even relevant to the discussion. “Computer readable medium” refers to a statutory medium, and claim 13 is, accordingly, statutory (as are its dependent claims). Should the Office persist in the rejection, it is respectfully requested that the Office provide specific reasoning, pointing to specific claim language and language from the specification, to support the assertion that the “computer readable medium” of claim 13 is non-statutory.

Claims 20 and 30 and their respective dependent claims are rejected under the same logic used to reject claims 1, 13, and their dependent claims. For the same reasons discussed above with respect to independent claims 1, 13, and 30, it is believed that the remaining claims are statutory as well.

B. § 103(a) Rejection over *Muttik*, and further in view of *Kouznetsov*

On pages 4-6, claims 1, 3, and 8-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muttik*, and further in view of *Kouznetsov*. Applicant respectfully traverses the rejection.

The test for non-obvious subject matter is whether the differences between the subject matter and the prior art are such that the claimed subject matter as a whole would have been obvious to a person having ordinary skill in the art to which the subject matter pertains. The United States Supreme Court in *Graham v. John Deere and Co.*, 383 U.S. 1 (1966) set forth the factual inquiries which must be considered in applying the statutory test: (1) determining of the scope and content of the prior art; (2) ascertaining the differences between the prior art and the claims at issue; and (3) resolving the level of ordinary skill in the pertinent art. As discussed further hereafter, Applicant respectfully asserts that the claims include non-obvious differences over the cited art.

As discussed further below, the rejections should be withdrawn because when considering the scope and content of the applied *Muttik* and *Kouznetsov* references there are significant differences between the applied combination and claims 1, 3, and 8-11, as the applied combination fails to disclose all elements of these claims. Thus, considering the lack of disclosure in the applied combination of all elements of claims 1, 3, and 8-11, one of ordinary skill in the art would not find these claims obvious under 35 U.S.C. § 103, and therefore the rejections should be withdrawn at least for this reason.

For instance, claim 1 recites, in part, “a malicious code analyzer disposed in a communication system traffic pattern between an originator of an information communication of said communication system traffic pattern and an intended recipient... said malicious code analyzer being configured to be transparent to systems of said communication system.” It is respectfully asserted that the cited combination fails to teach at least these features of claim 1.

The rejection does not rely on *Kouznetsov* to teach or suggest, “a malicious code analyzer disposed in a communication system traffic pattern between an originator of an information communication of said communication system traffic pattern and an intended recipient,” as recited by claim 1, nor does it appear that the cited portions of *Kouznetsov* teach or suggest such feature. Instead, the rejection relies upon *Muttik* to teach or suggest the feature. The rejection asserts that the above-recited feature of claim 1 can be found at Fig. 2, element 108 and column 1 line 65 to column 2 line 11 of *Muttik*. It appears that the rejection relies upon the emulator of *Muttik* to teach the claimed malicious code analyzer. Without admitting that such characterization is correct, it is noted that *Muttik* does not disclose the location of the emulator in a communications system traffic pattern between an originator and a recipient. In fact, the cited portions of *Muttik* do not appear to disclose a recipient other than the generic computer system 106, and emulator 110 is located in computer system 106. Thus, emulator 110 is not between computer system 106 and an originator/recipient. Therefore, the cited combination does not appear to teach or suggest the above-recited feature of claim 1.

Further, the cited combination does not appear to teach or suggest “said malicious code analyzer being configured to be transparent to systems of said communication system,” as recited by claim 1. The rejection admits that this feature is not taught or suggested by *Muttik*, instead relying on *Kouznetsov* to teach or suggest the feature. However, *Kouznetsov* does not teach or suggest the feature. The cited portion of *Kouznetsov* states that its “on-access scanner 702 may be entirely transparent to the user until malicious code is discovered.” *Kouznetsov* at col. 13, lines 22-25. However, the above-recited portion of *Kouznetsov* states that its analyzer is transparent to a user, which does not teach or suggest “transparent to systems of said communication system.” (emphasis added) Merely using the word “transparent” is not enough to teach or suggest that an item is transparent to a system of a communication system. Therefore, the cited combination does not appear to teach or suggest the above-recited feature of claim 1.

Dependent claims 3 and 8-11 each depend either directly or indirectly from independent claim 1 and, thus, inherit all of the limitations of independent claim 1. Thus, the cited combination of references does not teach or suggest all claim limitations of claims 3 and 8-11. It is respectfully submitted that dependent claims 3 and 8-11 are allowable at least because of their dependence from claim 1 for the reasons discussed above.

Furthermore, the dependent claims recite features that are novel and non-obvious in their own right. For instance, dependent claim 9 recites, in part, “wherein said malicious code analyzer comprises: code for identifying unwanted or unsolicited messages.” The rejection states that the above-recited feature of claim 9 is disclosed in column 3, lines 49-52 of *Muttik*. The cited section only discloses that the emulator analyzes the code to determine a pattern of calls to identify potentially malicious behavior. However, the cited section of *Muttik* does not teach analyzing the code or identifying unwanted or unsolicited messages. Thus, *Muttik* does not teach or suggest at least this feature of claim 9. The rejection does not rely on *Kouznetsov* to teach or suggest the feature, nor do the cited portions of *Kouznetsov* appear to teach or suggest the feature. Therefore, the above-recited feature is not taught by the cited combination of references.

Claim 10 recites, in part, “a steering module for said information communication between a first interface and a second interface of said system....” The rejection states that claim 10 has similar limitations as claim 3, and is therefore rejected for similar reasons. However, claim 3 does not require a steering module nor does claim 3 require the direction of at least some of the information communication to the malicious code analyzer. Therefore, the rejection’s assertion that the claims contain similar limitations is incorrect. Further, the sections of *Muttik* cited in the rejection of claim 3, and asserted as being relevant to claim 10, do not disclose a steering module between a first and a second interface of the system. Therefore, it is respectfully submitted that *Muttik* does not disclose all of the features of claim 10. The rejection does not rely on *Kouznetsov* to teach or suggest the feature, nor do the cited portions of *Kouznetsov* appear to teach or suggest the feature. Therefore, the above-recited feature of claim 10 is not taught by the cited combination of references.

Claim 11 recites “communications throttle for determining if said information communication is to be passed by said system.” The rejection states that *Muttik* discloses this feature at column 4 lines 8-11. However, the cited section of *Muttik* only discloses that the user is alerted of the decision that can indicate if the code exhibits or does not exhibit malicious behavior. The cited section does not disclose if the associated code is to be passed to the system, nor does it disclose a communications throttle for determining if the information is to be passed. Thus, *Muttik* does not disclose the features of claim 11. The rejection does not rely on *Kouznetsov* to teach or suggest the feature, nor do the cited portions of *Kouznetsov* appear to teach or suggest the feature. Therefore, the above-recited feature is not taught by the cited combination of references. Accordingly, Applicant respectfully requests the withdrawal of the 35 U.S.C. § 103 rejection of claims 1, 3, and 8-11.

C. § 103(a) Rejection over *Muttik* in view of *Kouznetsov*, and further in view of *Desai*

On pages 6-7, claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muttik* in view of *Kouznetsov*, and further in view of *Desai*. Applicant respectfully traverses the rejection.

As shown above, the cited combination of *Muttik* and *Kouznetsov* does not teach or suggest all limitations of claim 1. Dependent claim 10 depends from independent claim 1 and, thus, inherits all of the limitations of independent claim 1. Thus, the cited combination of *Muttik* and *Kouznetsov* does not teach or suggest all claim limitations of claim 10. The rejection does not rely on *Desai* to cure the deficiencies of *Muttik* and *Kouznetsov* with respect to claim 1, nor does *Desai* cure those deficiencies. It is respectfully submitted that dependent claim 10 is allowable at least because of its dependence from claim 1 for the reasons discussed above. Accordingly, Applicant respectfully requests the withdrawal of the 35 U.S.C. § 103 rejection of claim 10.

D. § 103(a) Rejection over *Muttik*, and further in view of *Desai*

On pages 7-9, claims 13-14, 16-22, 26-34 and 40-43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muttik*, and further in view of *Desai*. Applicant respectfully traverses the rejection.

Independent claim 13 is rejected using the same logic as that used to reject claims 1 and 10. Applicant disputes the assertion that claim 13 has the same features as claim 1 or claim 10. Nevertheless, it is noted that claims 1 and 10 are patentable, and since the same logic is used to reject claim 13 that is used to reject claims 1 and 10, it is believed that the rejection has failed to show obviousness of claim 13 as well.

Additionally, claim 13 is not obvious at least because the combination of *Muttik* and *Desai* does not teach or suggest, “code for analyzing malicious code present in information communication traffic between an originator of an information communication of said communication traffic and an intended recipient of said information communication,” as recited by claim 13. Specifically, neither *Muttik* nor *Desai* teaches or suggests analyzing code between an originator and a recipient of information communication. It appears that the rejection does not rely on *Desai* to teach or suggest this feature, nor does it appear that the cited portions of *Desai* teach or suggest this feature. Instead, it appears that the rejection relies on *Muttik* to teach or suggest the feature. In fact, it appears that the rejection relies upon the emulator of *Muttik* to teach the claimed analyzing code. Without admitting that such characterization is correct it is noted that *Muttik* does not disclose the location of the

emulator between an originator and a recipient. In fact, the cited portions of *Muttik* do not appear to disclose a recipient other than the generic computer system 106, and emulator 110 is located in computer system 106. Thus, emulator 110 is not between computer system 106 and an originator/recipient. Therefore, the cited combination does not appear to teach or suggest the above-recited feature of claim 13.

Further, claim 13 recites, in part, “which renders said code for analyzing malicious code invisible to said information communication originator and said intended recipient.” It is not clear which portion of either *Muttik* or *Desai* is used to teach or suggest the above-recited feature. Nevertheless, it is believed that the cited portions of neither of the references teaches or suggests this feature. Should the Office persist in the rejection, it is respectfully requested that portions of *Muttik* and/or *Desai* are specifically cited to teach or suggest this feature.

Independent claim 20 recites, in part, “releasing said at least a portion of said packets back into said traffic pattern.” The cited combination does not teach or suggest releasing said at least a portion of packets back into a traffic pattern. It appears that the rejection does not rely on *Desai* to teach or suggest this feature, nor does it appear that the cited portions of *Desai* teach or suggest this feature. Instead, it appears that the rejection relies on *Muttik* to teach or suggest the feature. The rejection cites the passage of *Muttik* at column 3, lines 54-57 to teach the feature. However, the cited portion merely states that emulator 110 analyzes code to detect malicious behavior. There is nothing in the cited portion to indicate that emulator 110 releases packets back into a traffic pattern. In fact, neither Fig. 1 nor Fig. 2 illustrate emulator 110 releasing packets (intercepted from an information communication traffic pattern) back into a traffic pattern. Therefore, the cited combination does not teach or suggest the above-recited feature of claim 20.

Independent claim 30 is rejected using the same logic as that used to reject claims 1, 3, and 10. Applicant disputes the assertion that claim 30 has the same features as claims 1, 3, or 10. Nevertheless, it is noted that claims 1, 3, and 10 are patentable, and since the same logic is used to reject claim 30 that is used to reject claims 1, 3, and 10, it is believed that the rejection has failed to show obvious of claim 30 as well.

Dependent claims 14, 16-19, 21,22, 26-29, 31-34, and 40-43 each depend either directly or indirectly from respective independent claims 13, 20, and 30 and, thus, inherit all of the limitations of independent claims 13, 20, and 30. Thus, the cited combination of references does not teach or suggest all claim limitations of claims 14, 16-19, 21,22, 26-29, 31-34, and 40-43. It is respectfully submitted that dependent claims 14, 16-19, 21,22, 26-29, 31-34, and 40-43 are allowable at least because of their dependence from claims 13, 20, and 30 for the reasons discussed above.

Furthermore, the dependent claims recite features that are novel and non-obvious in their own right. For instance, the rejection of claim 17 relies on the same logic as the rejection of claim 9, addressed above. Since claim 9 is non-obvious, it is believed that claim 17 is non-obvious as well.

Further, the rejection of claim 27 relies on the same logic as the rejection of claim 9, addressed above. Since claim 9 is non-obvious, it is believed that claim 27 is non-obvious as well.

Moreover, the rejection of claim 29 relies on the same logic as the rejection of claim 11, addressed above. Since claim 11 is non-obvious, it is believed that claim 19 is non-obvious as well. Accordingly, Applicant respectfully requests the withdrawal of the 35 U.S.C. § 103 rejection of claims 13-14, 16-22, 26-34 and 40-43.

E. § 103(a) Rejection over *Muttik* in view of *Kouznetsov*, and further in view of *Mathon*

On pages 9-11, claims 2, 4-7 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muttik* in view of *Kouznetsov*, and further in view of *Mathon*. Applicant respectfully traverses the rejection.

As shown above, the cited combination of *Muttik* and *Kouznetsov* does not teach or suggest all limitations of claim 1. Dependent claims 2, 4-7 and 12 depend from independent claim 1 and, thus, inherit all of the limitations of independent claim 1. Thus, the cited combination of *Muttik* and *Kouznetsov* does not teach or suggest all claim limitations of claims 2, 4-7 and 12. The rejection does not rely on *Mathon* to cure the deficiencies of

Muttik and *Kouznetsov* with respect to claim 1, nor does *Mathon* cure those deficiencies. It is respectfully submitted that dependent claims 2, 4-7 and 12 are allowable at least because of their dependence from claim 1 for the reasons discussed above. Accordingly, Applicant respectfully requests the withdrawal of the 35 U.S.C. § 103 rejection of claims 2, 4-7 and 12.

F. § 103(a) Rejection over *Muttik* in view of *Desai*, and further in view of *Mathon*

On pages 11-12, claims 15, 23-25 and 35-39 are rejected under 35 U.S.C. § 103(a) as being unpatentable over *Muttik* in view of *Desai*, and further in view of *Mathon*. Applicant respectfully traverses the rejection.

As shown above, the cited combination of *Muttik* and *Desai* does not teach or suggest all limitations of independent claims 13, 20, and 30. Dependent claims 15, 23-25 and 35-39 depend from respective independent claims 13, 20, and 30 and, thus, inherit all of the limitations of their respective independent claims. Thus, the cited combination of *Muttik* and *Desai* does not teach or suggest all claim limitations of claims 15, 23-25 and 35-39. The rejection does not rely on *Mathon* to cure the deficiencies of *Muttik* and *Desai* with respect to claims 13, 20, and 30, nor does *Mathon* cure those deficiencies. It is respectfully submitted that dependent claims 15, 23-25 and 35-39 are allowable at least because of their dependence from claims 13, 20, and 30 for the reasons discussed above. Accordingly, Applicant respectfully requests the withdrawal of the 35 U.S.C. § 103 rejection of claims 15, 23-25 and 35-39.

III. Conclusion

In view of the above, Applicant believes the pending application is in condition for allowance.

Applicant believes a fee of \$230.00 is due with this response for a two-month extension for response for a small entity. However, if additional fees are due, please charge our Deposit Account No. 06-2380, under Order No. 58895/P003US/10305848 from which the undersigned is authorized to draw.

Application No. 10/727,068
Amendment dated June 6, 2008
Reply to Office Action of December 11, 2007


Docket No.: 58895/P003US/10305848

Dated: June 6, 2008

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being transmitted via the Office electronic filing system in accordance with § 1.6(a)(4).

Dated: June 6, 2008

Signature:


Donna Dobson

Respectfully submitted,

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